



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|-----------------------|---------------------|------------------|
| 10/004,078                        | 10/27/2001  | Frederick Kiremidjian | SS-709-12           | 9346             |
| 7590                              | 04/07/2005  |                       |                     |                  |
| LAW OFFICES OF THOMAS E. SCHATZEL |             |                       | EXAMINER            |                  |
| A Professional Corporation        |             |                       | YANG, LINA          |                  |
| Suite 240                         |             |                       |                     |                  |
| 16400 Lark Avenue                 |             |                       | ART UNIT            | PAPER NUMBER     |
| Los Gatos, CA 95032-2547          |             |                       | 2665                |                  |
| DATE MAILED: 04/07/2005           |             |                       |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

Ar

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/004,078             | KIREMIDJIAN ET AL.  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Lina Yang              | 2665                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 27 October 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent published under section 12209, by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 2 1(2) of such treaty in the English language.

Claims 1 -6 are rejected under 35 U.S.C. 102(e) as being anticipated by Amplify.net's "Solution for DSL Distributed IP Service Management".

Regarding claim 1, Amplify.net discloses a method for managing the distribution of datapackets, the method comprising the steps of: associating a service-level policy that limits allowable bandwidths to particular nodes in a hierarchical network; classifying datapackets moving through said hierarchical network according to a particular service-level policy (page 9, section "IP Service Engine Description"); delaying any said datapackets in a buffer to enforce said service-level policy; maintaining a statistic for each said particular service-level policy related to how many said datapackets are in said buffer at any one instant; sending any newly arriving datapackets to said buffer simply if a corresponding service-level policy statistic indicates any other earlier arriving datapackets related to the same service-level policy are currently being buffered ; and

managing all datapackets moving through said hierarchical network from a queue in which each entry includes service-level policy bandwidth allowances for every hierarchical node in said network through which a corresponding datapacket must pass (Page 11, section “Class-based Queuing” and “TrafficShapping Algorithms”).

Claim 4 is rejected for the same reason as set forth in claim 1.

Regarding claims 2 and 5, Amplify.net further discloses testing in parallel whether a particular datapacket should be delayed in a buffer or sent along for every hierarchical node in said network through which it must pass (Page 11, section “Class-based Queuing” and “TrafficShapping Algorithms”).

Regarding claims 3 and 6, Amplify.net further discloses constructing a single queue of entries associated with corresponding datapackets passing through said hierarchical network such that each entry includes source and destination header information and any available bandwidth credits for every hierarchical node in said network through which a corresponding datapacket must pass (Page 14, section “iSurfCommander Module”).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amplify.net's "Solution for DSL Distributed IP Service Management" in view of Patel et al. (U.S. Patent No. 6,865,185 B1).

Regarding claim 7, Amplify.net's "Solution for DSL Distributed IP Service Management" discloses a network management system, comprising: a single queue comprising individual entries related to said datapackets circulating through said network, and further related to all network nodes through which each must pass(Col. 2, lines 22-25); and a traffic-shaping cell providing for an inspection of each one of said individual entries and for outputting a single decision whether to pass through or buffer each of said datapackets in all network nodes through which each must pass; wherein, means datapackets in a buffer are delayed to enforce said service-level policy, and a statistic is maintained for each said particular service-level policy related to how many said datapackets are in said buffer at any one instant, and any newly arriving datapackets are sent to said buffer simply if a corresponding service-level policy statistic indicates any other earlier arriving datapackets related to the same service-level policy are currently being buffered, and all datapackets moving through said hierarchical network from a queue are controlled in which each entry includes service-level policy bandwidth allowances for every hierarchical node in said network through which a corresponding datapacket must pass(page 9 and 11). Amplify.net's "Solution for DSL

Distributed IP Service Management" does not specifically point out to use a protocol processor providing for header inspection of datapackets circulating through a network and providing for an information output comprising at least one of source IP-address, destination IP-address, port number, and application type; and a classifier connected to receive said information output and able to associate a particular datapacket with a particular network node and a corresponding service-level policy bandwidth allowance. However, Patel et al. (U.S. Patent No. 6,865,185 B1) discloses a protocol processor providing for header inspection of datapackets circulating through a network and providing for an information output comprising at least one of source IP-address, destination IP-address, port number, and application type (inherently done when inserting label(s) or tag(s) in front of the data packet; Col. 2, lines 7-13); a classifier connected to receive said information output and able to associate a particular datapacket with a particular network node and a corresponding service-level policy bandwidth allowance (Col. 2, lines 25-44). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include using a protocol processor providing for header inspection of datapackets circulating through a network and providing for an information output comprising at least one of source IP-address, destination IP-address, port number, and application type; and a classifier connected to receive said information output and able to associate a particular datapacket with a particular network node and a corresponding service-level policy bandwidth allowance as taught by Patel et al. in the assembly of Amplify.net in order to complete the network management system.

Regarding claim 8, in addition to the 103 rejection for claim 7 as stated above, Amplify.net's "Solution for DSL Distributed IP Service Management" further discloses an output scheduler and marker for identifying particular ones of the individual entries in the single queue that are to be passed through or buffered (Page 11, section "Class-based Queuing" and "TrafficShapping Algorithms").

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amplify.net's "Solution for DSL Distributed IP Service Management" in view of Patel et al. (U.S. Patent No. 6,865,185 B1) as applied to claim 7 above, and further in view of Everdell et al. (U.S. Patent Application No. 20020165961 A1).

Regarding claims 9, Amplify.net and Patel have been stated above in 103(a) rejection for claim 7. The modified assembly of Amplify.net and Patel differs from the claimed invention in that it does not disclose to have at least one of the protocol processor, classifier, and traffic-shaping cell, are implemented as a semiconductor intellectual property and operate at run-time with the single queue. However, the use of semiconductor intellectual property to perform the above functions is well known in the art, Everdell et al. teaches use a traffic management chips to perform upper level traffic management within the network device (inherently a semiconductor intellectual property; [0709]). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include at least one of the protocol processor, classifier, and traffic-shaping cell, are implemented as a semiconductor intellectual property and operate at run-time with the single queue as taught by Everdell

Art Unit: 2665

in the modified assembly of Amplify.net and Patel in order to perform the desired functions.

***Double Patenting***

Claims 1-6 of current application (Application No. 10004078) are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10163408. The only difference in the claims is “method” versus “chip”. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 8-9 of current application (Application No. 10004078) are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-10 of copending Application No. 10004608. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim 7 of current application (Application No. 10004078) is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10004608 in view of claim 7 of copending Application No. 10163408. It's obvious to combine the claim 8 of copending Application No. 10004608 with the claim 7 of copending Application No. 10163408 to make a complete network management system. This is a provisional obviousness-type double patenting rejection.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Art Unit: 2665

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2665

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571) 272-3151. The examiner can normally be reached on Monday-Friday (8:00am-6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU  
PRIMARY EXAMINER